What is claimed is:

1. An optical system for detecting defect in a edge portion of a disk whch is translucent or transparent, comprising:

a illumination system for illuminating light beam to a inspected region of said edge portion of said disk through an inside portion of said disk by directing the light beam at a predetermined incident angle with respect to a peripheral surface of said disk to be inspected; and

a first light receiving system provided externally of said disk in a vicinity of said inspected region, for receiving scattered light from said inspected region.

2. The optical system for detecting defect as claimed in claim 1, wherein said light beam is made a spot, said spot is incident in an outer peripheral surface and said first light receiving system receives scattered light from said inspected region of said disk, which is rotating.

3. The optical system for detecting defect as claimed in claim 2, wherein said disk is a glass disk and said spot is incident in an outer peripheral side surface of said outer peripheral surface.

4. The optical system for detecting defect as claimed in claim 3, further comprising a second light receiving system provided externally of said disk, for receiving scattered light propagating within said disk from said inspected region thereof and emitted externally of said disk from a position or in the vicinity thereof, which is offset by a predetermined distance from a position of said outer peripheral side surface symmetrical to said incident position of said spot in said outer peripheral side surface about a diameter line of said disk passing through said

inspected region.

5. The optical system for detecting defect as claimed in claim 4, wherein said light beam spot is a laser light, each of said first and second light receiving systems has a light receiving plane, said light receiving plane is set at a certain angle within a range from 20° to 60° with respect to an upper or lower surfaces of said disk.

6. The optical system for detecting defect as claimed in claim 6, wherein said light receiving plane of said first light receiving system is opposing to a chamfered surface on said lower surface side of said disk, for detecting defect in said chamfered surface, and said light receiving plane of said second light receiving system is substantially vertical to said chamfered surface, for detecting defect in said inner peripheral side surface or said outer peripheral side surface.

7. The optical system for detecting defect as claimed in claim 4, wherein said light beam spot is a laser light, each of said first and second light receiving systems is a light receiver including an optical fiber and a light receiving plane of said optical fiber is set at a certain angle within a range from 20° to 60° with respect to an upper or lower surfaces of said disk.

8. The optical system for detecting defect as claimed in claim 7, wherein said light receiving plane of said optical fiber of said first light receiving system is opposing to a chamfered surface on said lower surface side of said disk, for detecting defect in said chamfered surface, and said light receiving plane of said optical fiber of said second light receiving system is substantially vertical to said

chamfered surface, for detecting defect in said inner peripheral side surface or said outer peripheral side surface.

9. A peripheral defect detector for detecting defect in a edge portion of a disk whch is translucent or transparent, comprising:

a illumination system for illuminating light beam to a inspected region of said edge portion of said disk through an inside portion of said disk by directing the light beam at a predetermined incident angle with respect to a peripheral surface of said disk to be inspected;

a first light receiving system provided externally of said disk in a vicinity of said inspected region, for receiving scattered light from said inspected region.

a drive mechanism for rotating a spindle on which said disk is mounted; and

a detection circuit for detecting defect in said inspected region of said disk by obtaining detection signal from said first light receiving system while rotating said disk.

10. The peripheral defect detector as claimed in claim 9, wherein said light beam is made a spot, said spot is incident in an outer peripheral surface.

11. The peripheral defect detector as claimed in claim 10, wherein said disk is a glass disk and said spot is incident in an outer peripheral side surface of said outer peripheral surface.

12. The peripheral defect detector as claimed in claim 11, further comprising a second light receiving system provided externally of said disk, for receiving scattered light

propagating within said disk from said inspected region thereof and emitted externally of said disk from a position or in the vicinity thereof, which is offset by a predetermined distance from a position of said outer peripheral side surface symmetrical to said incident position of said spot in said outer peripheral side surface about a diameter line of said disk passing through said inspected region.

13. The peripheral defect detector as claimed in claim 12, wherein said light beam spot is a laser light, each of said first and second light receiving systems has a light receiving plane, said light receiving plane is set at a certain angle within a range from 20° to 60° with respect to an upper or lower surfaces of said disk.

14. The peripheral defect detector as claimed in claim 13, wherein said light receiving plane of said first light receiving system is opposing to a chamfered surface on said lower surface side of said disk, for detecting defect in said chamfered surface, and said light receiving plane of said second light receiving system is substantially vertical to said chamfered surface, for detecting defect in said inner peripheral side surface or said outer peripheral side surface.

15. The peripheral defect detector as claimed in claim 12, wherein said light beam spot is a laser light, each of said first and second light receiving systems is a light receiver including an optical fiber and a light receiving plane of said optical fiber is set at a certain angle within a range from 20° to 60° with respect to an upper or lower surfaces of said disk.

16. A peripheral surface defect detection method for detecting defect in a edge portion of a disk whch is translucent or transparent, comprising the steps of:

illuminating light beam to a inspected region of said edge portion of said disk through an inside portion of said disk by directing the light beam at a predetermined incident angle with respect to a peripheral surface of said disk to be inspected; and

receiving scattered light from said inspected region by a first light receiving system provided externally of said disk in the vicinity of said inspected region while rotating said disk.

17. The peripheral surface defect detection method as claimed in claim 16, wherein said light beam is made a spot, said disk is a glass disk and said peripheral surface is an outer peripheral surface and said disk is mounted on a spindle and rotated.

18. The peripheral surface defect detection method as claimed in claim 17, wherein said disk is a glass disk and said spot is incident in an outer peripheral side surface of said outer peripheral surface.

19. The peripheral surface defect detection method as claimed in claim 18, further comprising the step of receiving, by a second light receiving system provided externally of said disk, scattered light propagating within said disk from said inspected region thereof and emitted externally of said disk from a position or in the vicinity thereof, which is offset by a predetermined distance from a position of said outer peripheral side surface symmetrical to said incident position of said spot in said outer peripheral side surface

about a diameter line of said disk passing through said inspected region.

20. The peripheral surface defect detection method as claimed in claim 19, wherein said light beam spot is a laser light, each of said first and second light receiving systems has a light receiving plane, said light receiving plane is set at a certain angle within a range from 20° to 60° with respect to an upper or lower surfaces of said disk.